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## Introducing proactive thinking in value alliance concept

Merili Randmaa  
Tallinn University of Technology  
[randmaamerili@gmail.com](mailto:randmaamerili@gmail.com)

### Abstract

*In today's volatile economic environment, market demands are changing constantly. In manufacturing industry, end-users and stakeholders are starting to demand solutions-products with services. Companies need to rethink their value chain and shift from cost-leadership to differentiation strategy. This, however requires reorganization of enterprise structure and management, creating collaborative inter-organizational networks (value alliances) and better integration with stakeholders and end-users in order to maximise value for the customers.*

*This paper gives a reader an overview of the background of these changes as well as brings out some main future directions companies can take in order to be competitive. Ideas of value star, intermediate information service organization and proactive behavior are introduced and linked with value alliance concept.*

### Keywords

*Manufacturing industry, value alliance, proactive thinking, intermediate organization, information service, value star*

### Introduction

An economy consists of the economic system of a country or other area. Consumption, saving and investment are core variable components in the economy and determine market equilibrium. There are four main sectors of economic activity: primary, secondary, tertiary and quaternary.

In economic development, long-run structural changes among the four main sectors of an economy base on the changes in demands. Hierarchy of needs is associated with different saturation levels of the goods of the four sectors. In the course of increasing income, the demand for goods of the primary sector (raw material) is first saturated, further increases of income lead to a saturation of the demand for goods of secondary sector (finished products). According to Fourastiè (1949), only the demand for goods in the tertiary sector (service) will never be saturated. People want more and better service because they

can afford it and because it saves their time to do something (Dietrich, 2010), (Hospers, 2004).

According to Fourastiè (1949), the human tragedy is that people always want more: once their material needs have been met, they long for immaterial things such as culture, recreation and services to extend their free time. The work required to create such services places severe demands on intellectual, social and communicative skills. For these reasons quaternary sector of the economy has started to have an effect in creating value for secondary and tertiary sector by providing information about the end-users, markets and partnership possibilities (Popper, 2000).

The quaternary sector of the economy describes a knowledge-based part of the economy which typically includes services such as information generation and sharing, information technology, consultation, education, research and development, financial planning, and other knowledge-based services. Quaternary sector refers to a part of the tertiary sector. In the quaternary sector, companies invest to ensure further expansion. It is seen as a way to generate higher margins or returns on investment. Research in quaternary sector is therefore directed into cutting costs, tapping into markets, producing innovative ideas, new production methods and methods of manufacture, amongst others (Busch, 2008).

In the field of manufacturing there are also some early signs of shift from production-centred manufacturing to production-service centred manufacturing. As quality and low price of a product have become prerequisites, the market is now becoming to demand extra services from manufacturers. Distribution, product lifecycle management, database services, prototyping, testing, financial services, repair and maintenance and consulting are just few of the services customer can have benefit from. One can assume that the demands to a manufacturing company will increase in time. In order to be ready for the shift, enterprises will need to make changes in their strategy, structure, management, and start looking for partner-enterprises to unite the strengths and face the challenges of the futures high-demanding business environment.

First section of this paper gives a brief overview of changes in the economical landscape of

manufacturing industry that have lead to a need for enterprises to reframe their strategies, change their structure and management. Second section examines proactive behaviour of an enterprise and finds some possible links with the fields of individual and organizational psychology. Third chapter defines the relationship between end-users, intermediates, suppliers and stakeholders as well as introduces some problems related to value creation process within an enterprise. Intermediate information supplier concept and value star concept are introduced as possible means to overcome those problems. Fourth section suggests how proactive thinking and value maximization focused strategies can be implemented the in modern value alliance concept. Finally section 5 concludes and discusses implications and limitations of this work.

## 1 Changes in manufacturing industry

The Industrial Revolution (18-19 century) marks a major turning point in human history, when almost every aspect of daily life was eventually influenced in some way. Most notably, average income and population began to exhibit unprecedented sustained growth (switch from primary to secondary sector of economy). Manual labour and draft-animal-based economy switched towards machine-based manufacturing, soon toward assembly line manufacturing, which enabled to produce high-volume and -quality products. Modern Japanese Six Sigma and lean manufacturing concepts of today enable to reduce waste, increase quality and fulfil customer needs.

As customer demands saturate in time, enterprises constantly need to find ways to offer new delighters for customers (Kano model). In general, there are two competitive business strategies a company can choose- cost leadership and differentiation (Voola, 2010). Most of the modern manufacturing industry chase to cut its costs and overheads, so they implemented distributed manufacturing and global manufacturing. Production was taken to low-cost production countries, far from customers and R&D departments.

The other manufacturing strategy, that is becoming a trend in order to meet growing demands for flexible, fast, well-planned manufacturing, is differentiation. The aim of this strategy is to add some value for the customer and distinguish in market. One way to achieve this is to form a collaborative inter-organizational network (value alliance), using inter-connected web systems.

### 1.1 Value alliance

Manufacturing has become a very wide area of economy; it requires a very broad range of information (end-user needs, new market opportunities, new possible partners, feedback etc.) knowledge and resources to function well. Companies have understood that they cannot provide everything that customers are demanding alone and have started to form inter-organizational

networks (Supply chain network, manufacturing cluster etc.). This enables companies within the network to share costs, knowledge and offer full solutions to end-users. Firms can specialize in those activities best suited to their particular sets of resources (Liao, 2010), (Kirytopoulos, 2010).

Collaborative inter-organizational networks, who are aiming to maximize customer value, can be called value alliances. As those alliances have both horizontal and vertical cooperation hierarchies, companies often need to compete and cooperate between each other at the same time, leading to higher complexity. It is important to define what the competing activities are and what collaboration activities within a value alliance are.

It is possible to achieve an effect of synergy within collaboration activities, maximizing the value. At the same time, close feel of competition makes companies work harder and makes the alliance more competitive in global market. Therefore, competition from between companies will be shifted to competition between alliances (Morish, 2002).

## 2 Proactive behaviour

The adjective “proactive” has been widely used in the fields of business strategy, management, product development, manufacturing and other fields of science. However, it is difficult to find explanation and definition for this term. As proactive behaviour is relatively well covered in individual psychology field, we are trying to describe what proactive means by creating links with individual psychology.

Proactive behaviour is not the same as an adaptive performance, in which individuals modify their behaviour to meet the demands of new situations. Although adaptivity involves adapting to change, proactive behaviour involves initiating change. Problem prevention, acting to prevent the reoccurrence of challenges and barriers to work, has been identified as an important proactive behaviour too (Parker, 2010). In order to be proactive- initiate change, relevant information about the current situation as well as an idea of possible new situations is required. This description of proactive behaviour seems to be applicable in business and organization strategy.

### 2.1 Proactive behaviour in individual psychology

Proactive behaviour has three key attributes: it is self-starting, change oriented and future focused. Theory and evidence suggest that proactive goals (moving higher on career ladder) will be more likely to result in effective striving and hence achievement of the goal, if they:

- Are specific and challenging
- Are learning focused (rather than solely performance oriented)
- Include sub goals and planning (it is possible to get some feedback on the way to achieving a goal)

Goal generation processes occur prior to task engagement, creating a “road map for action” (Chen & Kanfer, 2006). It involves envisioning and planning, under one’s own volition, the goal to bring about a new different future by changing the self and/or the environment (Bindl & Parker, 2009). Envisioning involves anticipating future outcomes and mentally representing and imagining a person, situation or event at some forward point in time. There are three higher categories of individual level proactive behaviour at work (Parker, Bindl, & Strauss, 2010). Motivation determines the direction of behaviour as well as its form, intensity and duration, and hence common motivations are likely to direct proactive behaviour toward having a particular target of impact (Sharon & Parker, 2010):

- Proactive person-environment fit behaviour- encompasses proactive goals to achieve a better fit between one’s own attributes and those of the internal work environment (by actively negotiating changes in their job so that it better fits their skills, abilities and preferences, or job-role negotiation)
- Proactive work behaviour- involves proactive goals to improve the internal organizational environment (taking charge to improve work methods within an organization and proactive problem solving)
- Proactive strategic behaviour- taking control and bringing about change to improve organization’s strategy and its fit with the external environment (issue selling, strategic scanning)

Before an individual will decide to act proactively, there has to be a set of motivations:

- ‘Can do’ motivation- self-efficacy perceptions (Can I do it? How feasible is it? How risky is it?),
- ‘Why to’ motivation- desirability of future goals (Why do I need to do it? What will I get?)

If individuals perceive that the effort involved is too costly in terms of time, money, energy or other resources relative to the gain they may provide, they will not engage in proactive coping. However reason to motivation might be more important in proactive goal processes than can do states, particularly for very long-term oriented proactive goals. It also appears that having fair procedures ensures that individuals feel safe to be proactive, whereas a lack of procedural justice might render proactive action as overly risky. If the leaders are passive in their personality, they might be “supportive”, but not in ways that stimulate proactivity (Parker, Bindl & Strauss, 2010).

## 2.2 Proactive behaviour in an enterprise and value alliance

If we see an enterprise as a self-conscious and rational organism with a goal to fit in the environment, we can possibly carry some theories and models from individual psychology over to

understanding an enterprise. As enterprises are lead by individuals, basic psychological theories must be relevant also in business environment. Therefore, with reference to proactive behaviour in individual psychology, we argue that a proactive enterprise has a “relatively stable behavioural tendency” to initiate change in the environment. It tends to make things happen, by anticipating and preventing problems, and seizing opportunities. Proactivity is very important in today’s decentralized workplace, where there is greater competition and enhanced pressure for innovation (Sharon & Parker, 2010).

If we see a value alliance as an integration of enterprises with different abilities, behavioural pattern and skills, but at the same time, the same goals- fit in the environment, we can possibly implement some methods or tools from individual psychology and work environment design fields in order to give a clear proactive direction to the outcomes of the system. As there are many proactive enterprises with different knowledge, skills, abilities and proactive behaviours (proactive person-environment fit behaviour, proactive work behaviour, proactive strategic behaviour) in an value alliance, there is a very high potential to make big changes in environment that are beneficial for all the companies within the system.

As being proactive requires a good understanding of the current situation and an idea of the possible changes, companies within a value alliance need to have relevant amount of information. However, as collecting, synthesizing and organizing information is expensive, it would be reasonable to have one intermediate organization within a value alliance that would provide all the companies involved with relevant information. Due to the fact that most of the clusters are formed within one or two economical fields, cost for information would be shared.

## 3 End-users, intermediates, suppliers, stakeholders and value creation

In order to form a successful business strategy, management process and organizational capabilities, an enterprise needs to understand who its customers (stakeholders) and end users are and where in the business process the value (they sell) is created. In this paper we distinguish end-users, intermediates, suppliers and stakeholders. End-users are the customers, who are going to use the value of a product and service. Suppliers are the companies who participate directly in value creating process (raw material, production, distribution service etc. suppliers). Direct value is created in primary, secondary and tertiary sector of economy. Intermediates are the companies of quaternary sector, providing primary, secondary and tertiary sector with systemized information about end-users` delighters, new markets, possible partners and of other kind they need to make decisions. Intermediates create indirect value to both end-users

and suppliers. Stakeholder-relationships can be found within a supply chain as well as out of it. In general, a stakeholder is a party that benefits from the product, service or information. The other party is a supplier.

### 3.1 Value creation

As some decades ago companies were focused to cut the costs, today enterprises are interested in managing their companies to create value. Old management philosophies are outmoded. However, creating stakeholder and end-user value requires more than the will to succeed. It requires concrete plans and real action- to systematically prepare to win. It is a holistic approach to strategic management and should be the focus of everything a company does (Armour, 2001).

In textile industry, the supply chain is quite long. Raw materials sold within a supply chain are processed many times before becoming part of the final consumer product and a desirable feature offered by a raw material may or may not have an impact on an end-user's level of satisfaction (Redfern, 2003). There are also some intermediates such as agents (import or export), who may add cost but may not add value. (Popp, 2000). The same goes with machine building and mechatronics industry. Figure 1 shows how demand chain and supply chain are linked within a value chain and how information, material and service are handled in regular enterprise.

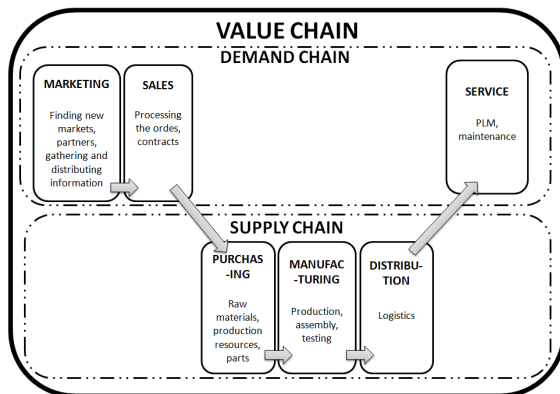


Figure 1: Value chain

Developments in information technology enable to receive and share information faster and concurrently. This saves costs, time and liberates us from constraints such as time (where things can be done), place (where things can be done), actor (who can do what) and constellation (with whom things can be done) (Normann, 2001). It is now beneficial to see the whole value creating process as a value star instead of value chain (Figure 2), where all the suppliers (product, production, service, distribution, marketing etc.) as well as end-users (by expressing their needs) are adding value collaborately.

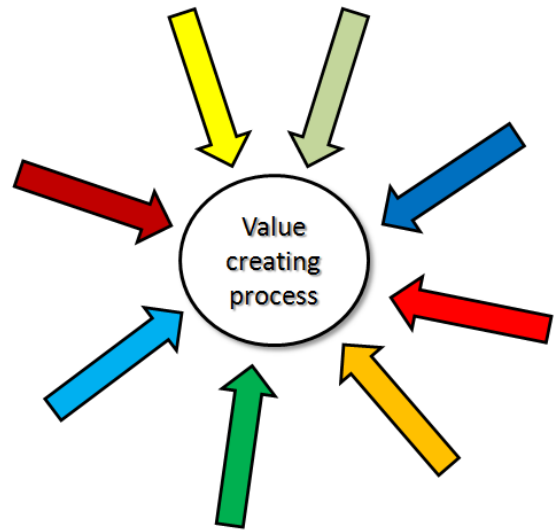


Figure 2: Value star

### 3.2 Intermediate information organizations

In integrated supply chain network each supplier/purchaser interface tends to operate at local level with managers focusing on the performance of their own operations and interfaces. There is little feedback about end-user needs and expectations to the other end of the supply chain due to the lack of suitable mechanism and the long timescales. Inevitably also the language used to describe product features is of a technical type and not the language of the end-user (Redfern, 2003). There is a need for intermediates, who handle the information flow that is needed to make the economy work. Intermediates improve communication between buyers and sellers by acting as a hub. They are able to integrate markets over space and time, adding value by improving co-ordination, effecting integration of supply and demand (Popp, 2000).

Information costs may be regarded as a generalization of transaction costs and occur in the collecting, communicating and storing of information, and in costs of calculation and forming the judgements on which decisions are taken. This makes the theory of information costs useful- the outcome of decisions regarding the trade-off between the value of a piece of information and the cost of its collection determine "what information is collected and to whom". Market-making intermediation is one of the most important sources of added value in the entire economy (Popp, 2000).

The ability of intermediaries to economize on information costs is a two-stage process. First through specialization, learning and cross-subsidization, their costs of collecting information can be reduced. Second, by collating and synthesizing collected information, they can both improve the quality and reduce the quantity of information fed to those whom they communicate. Intermediates' principal role is to handle information flows rather than material flows and add value to the

end user as well as companies within a system by doing this (Popp, 2000).

As often information costs are considered to be too expensive for a company, often this activity is reduced to minimum and enterprises seek for information about new markets, customer needs, possible new network partners etc when they are pushed out of their comfort zone. However, it is theoretically possible to integrate market-making and information handling intermediates into value alliances in order to share the costs of information. As usually enterprises within collaborative networks have similar end-users and they are in similar markets, the information they need to make strategical decisions and planning is also similar. It is not reasonable (and possible) for all the enterprises to have information department. Costs can be shared within a value alliance. Companies from quaternary sector are able to supply manufacturers with such kind of information at reasonable prize- they have sufficient expertise, tools and knowledge to optimize costs and provide high quality information.

Intermediates can be seen as an antenna, receiving, analysing and systemizing information from end-users, stakeholders, new markets, new partners and distributing it to the value alliance (Figure 3).

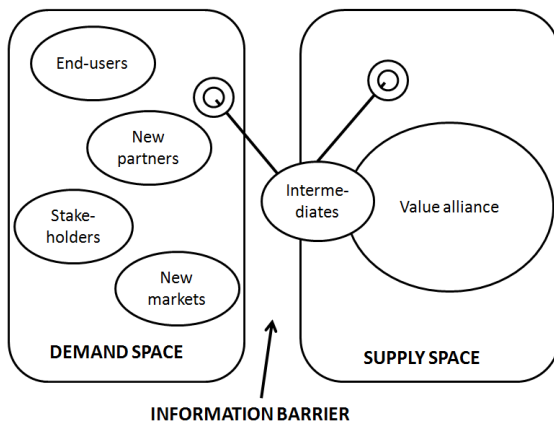


Figure 3 Information barrier between supply and demand; antenna of intermediates to overcome it

#### 4 Integrating the powers of proactive thinking and value maximization focus into modern value alliance

Product quality and low cost have become expected measures, some end-users have now desire for some added value with a product-service. Proper service marketing and product planning requires creative visualization to effectively evoke a concrete image in the service consumer's mind. That means it requires proactive thinking- self- initiating changes in customers satisfaction level without knowing what he wants. However, in order to set proactive goals, sufficient amount of high-quality information is needed. As the main principle of value alliance is to share costs and resources, it is practical to have one intermediate information collecting, systemising

and distributing organization within a system. Relevant information about end-users` needs, new markets and new opportunities for finding partners are beneficial for all the companies involved in the system as well as to the end-users. System can make better strategies, compete in global market and provide solutions to end-users. Moreover, good service enables to create customer-based relationships, based on creating long-term business relationships within a value alliance. Everyone benefits.

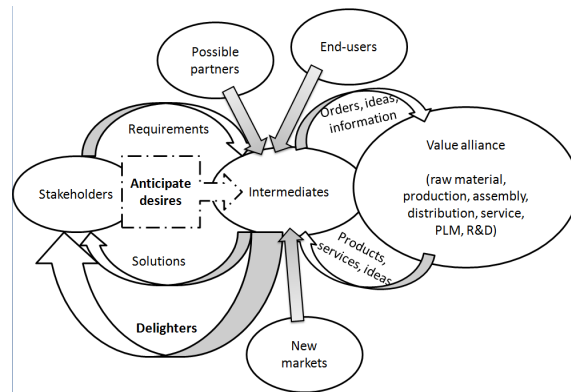


Figure 4 Role of intermediates in between stakeholders, value alliance and business environment

#### 5 Discussions

Changes in customers` demands require manufacturing enterprises to reform their strategies and start providing solutions with maximum value to the end user. As no company alone can provide it alone today, companies need to form collaborative inter-organizational networks and partnerships. This enables companies within the network to share costs, knowledge and offer full solutions to end-users. Firms can specialize in those activities best suited to their particular sets of resources.

Although the need for changing firms` strategy is fairly well documented in marketing, strategy and manufacturing literatures, guidance from information management perspective is relatively poor. Processes required to develop and nurture the partnership beyond the initial decision to forge such a relationship are important to understand in order to prevent mismanaging potentially valuable partnerships. Further research needs to be done to cover also information and knowledge sharing strategies in partnerships.

Some decades ago companies were focused to cut the costs, today enterprises are interested in managing their companies to create value. Collaborative inter-organizational networks aiming to create maximum customer value can be called value alliances.

As end-user and stakeholders` needs are changing very fast and the competition in market is densifying due to globalization, companies need to think proactively. Being proactive requires a good

understanding of the current situation and an idea of the possible changes that can occur. Therefore companies within a value alliance need to have relevant amount of information. Collecting, synthesizing and organizing information is expensive; therefore it would be reasonable to have an intermediate company within a value alliance that would provide all the companies involved with relevant information at reasonable prize.

Although the need for added value creation is well documented in literature, information acquisition possibilities as well as successful information flows are not explained. It is important to know what "value" means to end-users, stakeholders and suppliers. Supposing that some meanings are different within a supply chain, we can argue that there is a need for intermediate information supply organization, crossing the information barrier between suppliers, business environment and stakeholders.

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